

These belong to another, larger insect, a species of *Notonecta*, which M. Guérin-Méneville has named *Notonecta unifasciata*.—*Pharmaceutical Journal*, Sept. 1, 1858.

*New Experiments on Ægilops triticoides.* By Dr. GODRON.

Observations made at Montpellier on the awned and awnless forms of *Ægilops triticoides*, which are met with there in a wild state, led the author to regard this plant as a hybrid of *Ægilops ovata* fertilized by the pollen of wheat ("Quelques Notes sur la Flore de Montpellier," Besançon). Desirous of confirming or negating this supposition by direct experiment, Dr. Godron tried, in 1853, to reproduce this vegetable form by artificial fecundation, and in 1854 he obtained plants of *Ægilops triticoides* ("De la Fécondation des *Ægilops* par des *Triticum*," Ann. des Sc. nat. sér. 4. Botanique, ii. p. 218. See also Comptes Rendus, 17 July 1854, and Ann. Nat. Hist. 2nd ser. xiv. p. 394). These facts were confirmed, in 1856 and 1857, by the experiments of MM. Regel in Germany, Vilmorin and Grœnland at Paris, and Planchon at Montpellier. *Ægilops triticoides* is therefore a hybrid plant. The author considers that no doubt can remain on this question. (See Journal of the R. Agric. Soc. of England, xix. part 1. p. 103, 1858.)

*Ægilops triticoides* is most frequently sterile; but sometimes, though rarely, it affords fertile seeds; and it is these seeds which, in the hands of M. Fabre of Agde, have produced *Ægilops speltæformis*. As Dr. Godron could not doubt the exactitude of the facts reported by this skilful and conscientious observer, and was on that account quite convinced that *Ægilops speltæformis* arose from *Ægilops triticoides*, he at first sought to explain this transformation on the foundation of a law accepted by almost all the authors who have studied the physiological phænomenon of hybridity, namely that fertile hybrids return to one of their original types after a certain number of generations. *Ægilops triticoides* seemed to present a new confirmation of this law; *Ægilops speltæformis* is, in fact, more nearly approximate to wheat than *Ægilops triticoides*; and, supposing the law in question to be true, the natural conclusion was, that *Ægilops speltæformis* reverted insensibly to *Triticum vulgare*. The author now doubts much whether that law is solidly established. On the one hand, this return of *Ægilops triticoides* to its male type, through *Ægilops speltæformis*, is so long in coming to pass, that it may be despaired of. On the other hand, the experiments he has made upon hybrids in general, and especially hybrids of *Verbascum* and *Digitalis*, have led him to think that fertile hybrids are ordinarily only produced when they are fecundated anew by one of the two specific types which have given birth to them. All the hybrid plants he has hitherto obtained by artificial fecundation have been sterile, with the exception of flowers which he has fecundated with the pollen either of the male or female parent; he has then mostly obtained fertile seeds, and the product of this new fecundation then approached nearer to the male type.

Might it not be the same with *Ægilops triticoides* when it is fertile? Dr. Godron was desirous of making certain of this by the experimental method; and for this purpose it was necessary to produce this *Ægilops* anew at Nancy, as he had previously done at Montpellier. He obtained several plants of it, some of which were fecundated with wheat in the summer of 1857. This new fecundation by the male type afforded nine seeds, which germinated perfectly. They were sown in autumn, and protected from excessive cold in a frame. These plants flowered, and produced *Ægilops speltæformis*, resembling that which Dr. Godron had cultivated for four years, and which was derived from seed from the Paris Garden. Dr. Godron compared the two plants in a fresh state: they were sown at the same time, but separately; they flowered in the same week, and he could not detect any difference between them. Finally, he adds that the ovaries of this *Ægilops speltæformis* obtained artificially have already (June 29th) acquired their normal size, and appear well developed: he has reason to think that they will furnish fertile seeds, like the *Ægilops speltæformis* cultivated by M. Fabre.

*Ægilops speltæformis* is, then, a new hybrid plant resulting from the fecundation of *Ægilops triticoides* by *Triticum vulgare*; it is a true *quadroon*, if we may use here a term by which is designated one of the degrees of crossing between the Negro and the Caucasian race.

The author anxiously invites botanists interested in this question to repeat his new experiments; and they will be convinced. This same year, however, experiments similar to the above, the results of which are as yet unknown to him, will serve to check the author's. They have been made by MM. Vilmorin and Grœnland. Lastly, M. J. Gay brought from Beziers last year a seed of the wild *Ægilops triticoides*, which has germinated. This learned botanist will doubtless make known the result which it will produce.—*Comptes Rendus*, July 19, 1858.

*On a new species of Platyrhynchus from the Rio Napo, in the Republic of Ecuador.* By PHILIP LUTLEY SCLATER, M.A.

PLATYRHYNCHUS CORONATUS, Verreaux, MS.

*Brunnescenti-olivaceus, alis caudaque fuscis, pilei cristati parte mediali flavissima laterali utrinque castanea; linea superciliari et altera a rictu descendente nigris; loris et corpore subtus cum tectricibus subalaribus sordide flavicantibus; rostro superiore nigro, inferiore albicante; pedibus pallide fuscis.*

Long. tota 3·8, alæ 2·4, caudæ 1·2, rostri a rictu ·55, tarsi ·55.

This is a typical species of the genus *Platyrhynchus* with the bill nearly of the same breadth and shape as in *P. cancruma*, and of the general size and form of that species; but it is easily recognizable by its bright yellow crest being broadly margined with deep chestnut, and by the shorter and more slender tarsi. These two birds and *Platyrhynchus rostratus* are the only members of the group with which I am acquainted.—*Proc. Zool. Soc.* Jan. 26, 1858.